RUSM Natalie 11/3/04

Access DB# 134596

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester=s full Name: Devesh Khare Examiner #: 77931 Date: 10/06/2004
Art Unit: 1623 Phone Number 272-0653 Serial Number: 09/889,687
Mail Box: Remsen 5C18 and Bldg/Room Location: 5C35 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be search Include the elected species or structures, key words, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: See Bib Data Sheet on e-dan.

Inventors (please provide full names): See Bib Data Sheet on e-dan.

Earliest priority Filing Date: **01-18-1999**

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please carry out a structure search and preparation on the following claims:

Please see the attached sheet for claim 23 (Formula I and II) and claim 28.

Thank you.

STAFF USE ONLY

Searcher:	**Type of Search**	**Vendors and cost where applicable**
Searcher Phone #:	NA Sequence (#)	STN
Searcher Location:	AA Sequence (#)	Dialog
Date Searcher Picked Up:	Structure (#)	Questel/Orbit
Date Completed:	Bibliographic	Dr. Link
Searcher Prep & Review Time:	Litigation	Lexis/Nexis
Clerical prep time:	Fulltext	Sequence Systems
Online Time:	Patent Family	WWW/Internet
	Other	Other (specify)

PTO-1590 (1-2000)

Date completed:	**Search Site**	**Vendors**
Searcher: Beverly e 2528	STIC	IG
Terminal time:	CM-1	✓ STN
Elapsed time:	Pre-S	Dialog
CPU time:	**Type of Search**	APS
Total time:	N.A. Sequence	Geninfo
Number of Searches:	A.A. Sequence	SDC
Number of Databases:	Structure	DARC/Questel
	Bibliographic	Other

PTO-1590 (9-90)

Khare, D.
09/889687

(FILE 'REGISTRY' ENTERED AT 11:52:13 ON 08 NOV 2004)
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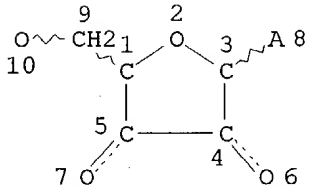

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE
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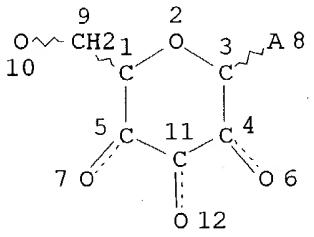

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE
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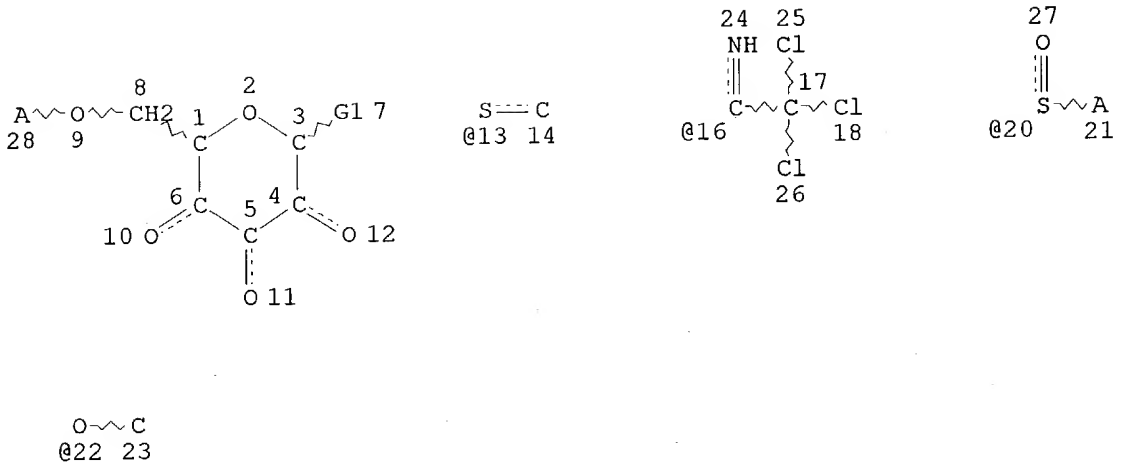
L94 STR



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NSPEC IS RC AT 21
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 26

STEREO ATTRIBUTES: NONE
L95 48207 SEA FILE=REGISTRY SUB=L36 SSS FUL L94

100.0% PROCESSED 177879 ITERATIONS 48207 ANSWERS
SEARCH TIME: 00.00.02

(FILE 'CAPLUS' ENTERED AT 11:53:02 ON 08 NOV 2004)
L96 17261 SEA ABB=ON PLU=ON L95
L97 10615 SEA ABB=ON PLU=ON L96(L)(SPN OR PREP?)/RL

L99 616 SEA ABB=ON PLU=ON L97(L)(OLIGOSACCHARIDE OR OLIGO SACCHARIDE OR NEOGLYCOCONJUGATE OR GLYCOCONJUGATE OR (NEOGLYCO OR GLYCO)(W)CONJUGATE)

L101 9 SEA ABB=ON PLU=ON L99(L)BUILD? BLOCK

E1 THROUGH E91 ASSIGNED

L101 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 23 Oct 2002
ACCESSION NUMBER: 2002:803363 CAPLUS
DOCUMENT NUMBER: 138:24924
TITLE: An Orthogonally Protected α,α-Bis(aminomethyl)-β-alanine Building Block for the Construction of Glycoconjugates on a Solid Support

Searcher : Shears 571-272-2528

AUTHOR(S): Katajisto, Johanna; Karskela, Tuomas; Heinonen, Petri; Loennberg, Harri
CORPORATE SOURCE: Department of Chemistry, University of Turku, Turku, FIN-20014, Finland
SOURCE: Journal of Organic Chemistry (2002), 67(23), 7995-8001
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 138:24924

AB Synthetic glycoclusters are extensively used as mimetics of naturally occurring, multivalent carbohydrate ligands in various glycobiol. applications. Their preparation, however, is far from trivial, and it still is a limiting factor in the study of carbohydrate binding. The authors herein report the synthesis of an orthogonally protected building block, N-Alloc-N'-Boc-N''-Fmoc-α,α-bis(aminomethyl)-β-alanine (I), and its use in the preparation of triantennary peptide glycoclusters on a solid support. The assembly of the clusters involves removal of the amino protections of the solid-supported branching unit I in the order Fmoc, Boc, and Alloc, and subsequent coupling of peracetylated O-(glycopyranosyl)-N-Fmoc-L-serine pentafluorophenyl esters (D-galactose, D-glucose, D-mannose, and D-ribose) to each exposed amino group.

IT **152389-14-5P 243469-45-6P 478062-63-4P**
RL: RCT (Reactant); **SPN (Synthetic preparation); PREP (Preparation)**; RACT (Reactant or reagent)
(preparation of an orthogonally protected bis(aminomethyl)-β-alanine **building block** for the solid-phase construction of **glycoconjugates**)

IT **478062-65-6P 478062-66-7P 478062-67-8P 478062-68-9P**
RL: **SPN (Synthetic preparation); PREP (Preparation)**
(preparation of an orthogonally protected bis(aminomethyl)-β-alanine **building block** for the solid-phase construction of **glycoconjugates**)

REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L101 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 12 Apr 2001
ACCESSION NUMBER: 2001:259282 CAPLUS
DOCUMENT NUMBER: 135:19843
TITLE: Application of novel, N-DTPM protected D-glucosamine building blocks in oligosaccharide synthesis
AUTHOR(S): Singh, L.; Seifert, J.
CORPORATE SOURCE: 3 Hi-Tech Court, Brisbane Technology Park, Alchemia Pty Ltd., Eight Mile Plains, 4113, Australia
SOURCE: Tetrahedron Letters (2001), 42(17), 3133-3136
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 135:19843

AB A study of glycosylation reactions was performed, using novel N-DTPM protected glucosamine donors and acceptors ranging from achiral primary

alcs. to various alcs. within the D-GlcNAc-, D-Gal- and D-Glu-series. The results show high yielding reactions with good β-selectivities.

IT **342640-48-6P 342640-49-7P 342640-50-0P 342640-51-1P**
RL: **SPN (Synthetic preparation); PREP (Preparation)**
(preparation of **oligosaccharides** via regioselective glycosylation of novel N-DTPM protected D-glucosamine **building blocks**)

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L101 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 28 Feb 2001
ACCESSION NUMBER: 2001:143892 CAPLUS
DOCUMENT NUMBER: 134:237716
TITLE: Automated solid-phase synthesis of oligosaccharides
AUTHOR(S): Plante, Obadiah J.; Palmacci, Emma R.; Seeberger, Peter H.
CORPORATE SOURCE: Department of Chemistry, Massachusetts Institute of Technology, Cambridge, MA, 02139, USA
SOURCE: Science (Washington, DC, United States) (2001), 291(5508), 1523-1527
CODEN: SCIEAS; ISSN: 0036-8075
PUBLISHER: American Association for the Advancement of Science
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 134:237716

AB Traditionally, access to structurally defined complex carbohydrates has been very laborious. Although recent advancements in solid-phase synthesis have made the construction of complex oligosaccharides less tedious, a high level of tech. expertise is still necessary to obtain the desired structures. We describe the automated chemical synthesis of several oligosaccharides on a solid-phase synthesizer. A branched dodecasaccharide was synthesized through the use of glycosyl phosphate building blocks and an octenediol functionalized resin. The target oligosaccharide was readily obtained after cleavage from the solid support. Access to certain complex oligosaccharides now has become feasible in a fashion much like the construction of oligopeptides and oligonucleotides.

IT **330457-52-8P 330457-55-1P**
RL: RCT (Reactant); **SPN (Synthetic preparation); PREP (Preparation)**; RACT (Reactant or reagent)
(preparation of branched **oligosaccharides** using solid-phase synthesis methods using glycosyl phosphate **building blocks**)

IT **253683-35-1P 253683-36-2P 254442-16-5DP,** resin-bound
RL: **SPN (Synthetic preparation); PREP (Preparation)**
(preparation of branched **oligosaccharides** using solid-phase synthesis methods using glycosyl phosphate **building blocks**)

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L101 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 19 Oct 2000

ACCESSION NUMBER: 2000:737828 CAPLUS
DOCUMENT NUMBER: 134:17644
TITLE: New phenyl 6,4'-substituted-1-thio-β-maltosides, building blocks for the synthesis of linear and branched malto-oligosaccharides
AUTHOR(S): Motawia, Mohammed Saddik; Larsen, Kim; Olsen, Carl Erik; Moller, Birger Lindberg
CORPORATE SOURCE: Plant Biochemistry Laboratory, Department of Plant Biology, The Royal Veterinary and Agricultural University, Copenhagen, DK-1871, Den.
SOURCE: Synthesis (2000), (11), 1547-1556
CODEN: SYNTBF; ISSN: 0039-7881
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 134:17644

AB An efficient strategy to synthesize a number of new phenylthio-maltoside derivs. in yields from 55 to 95% is described. These derivs. can be used as suitable building blocks for stepwise synthesis of starch derived malto-oligosaccharides.

IT **5346-81-6P 244286-77-9P 250335-04-7P 259742-11-5P 309913-14-2P 309913-15-3P 309913-16-4P 309913-20-0P 309913-21-1P**
RL: RCT (Reactant); **SPN (Synthetic preparation)**; **PREP (Preparation)**; RACT (Reactant or reagent)
(preparation of new Ph-substituted-thio-β-maltosides, **building blocks** for the synthesis of linear and branched malto-**oligosaccharides**)

IT **250335-03-6P 309913-17-5P 309913-18-6P 309913-19-7P 309913-22-2P**
RL: **SPN (Synthetic preparation)**; **PREP (Preparation)**
(preparation of new Ph-substituted-thio-β-maltosides, **building blocks** for the synthesis of linear and branched malto-**oligosaccharides**)

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L101 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 21 Jul 2000
ACCESSION NUMBER: 2000:493559 CAPLUS
DOCUMENT NUMBER: 133:105256
TITLE: Protecting groups for monosaccharides as universal building blocks for oligosaccharide synthesis
INVENTOR(S): Papageorgiou, John; Dekany, Gyula; Bornaghi, Laurent Francois
PATENT ASSIGNEE(S): Alchemia Pty. Ltd., Australia
SOURCE: PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000042057	A1	20000720	WO 2000-AU25	20000118

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

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EP 1144430	A1	20011017	EP 2000-902502	20000118
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002538085	T2	20021112	JP 2000-593624	20000118
AU 771708	B2	20040401	AU 2000-24252	20000118
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			WO 2000-AU25 W	20000118

OTHER SOURCE(S): MARPAT 133:105256
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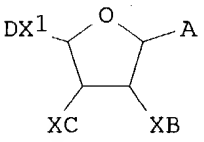

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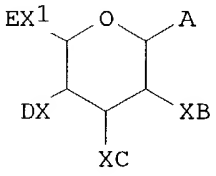

II

AB The invention provides collections of orthogonally-protected monosaccharides as universal building blocks for the synthesis of glycoconjugates of non-carbohydrate mols., neo-glycoconjugates, and oligosaccharides. This orthogonal protection strategy allows for the specific deprotection of any substituent on the saccharide ring, and greatly facilitates targeted or library-focused carbohydrate-related syntheses. In particular, the invention provides a universal monosaccharide building block I and II in which A is a leaving group; X is hydrogen, O, N or N3; X1 is hydrogen, CH2O, CH2NH, CH3, CH2N3 or COO; and B, C, D and E are protecting groups that can be cleaved orthogonally, and in which B, C, D and E are absent when X is hydrogen or N3, and E is absent when X1 is hydrogen, CH3 or N3. Thus, Me 6-O-(t-butyldiphenylsilyl)-3-O-(p-chlorobenzoyl)-2-deoxy-2-[1-(4,4-dimethyl-2,6-dioxocyclohex-1-ylidene)ethylamino]-4-O-tetrahydropyranyl-1-thio-β-D-glucopyranoside was prepared as a building block for oligosaccharide synthesis.

IT **151072-06-9P 282526-21-0P 282526-22-1P**
RL: RCT (Reactant); **SPN (Synthetic preparation); PREP (Preparation)**; RACT (Reactant or reagent)
(protecting groups for monosaccharides as universal **building blocks** for **oligosaccharide** synthesis)

IT **282526-23-2P**
RL: **SPN (Synthetic preparation); PREP (Preparation)**
(protecting groups for monosaccharides as universal **building**

blocks for **oligosaccharide** synthesis)
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L101 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 15 Jul 1998
ACCESSION NUMBER: 1998:431211 CAPLUS
DOCUMENT NUMBER: 129:189556
TITLE: Assembly of Oligosaccharide Libraries with a Designed Building Block and an Efficient Orthogonal Protection-Deprotection Strategy
AUTHOR(S): Wong, Chi-Huey; Ye, Xin-Shan; Zhang, Zhiyuan
CORPORATE SOURCE: Department of Chemistry and The Skaggs Institute for Chemical Biology, Scripps Research Institute, La Jolla, CA, 92037, USA
SOURCE: Journal of the American Chemical Society (1998), 120(28), 7137-7138
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Synthesis of oligosaccharides using building blocks containing four selectively removable protecting groups as acceptors for glycosidation. The four protecting groups are chloroacetyl, p-methoxybenzyl, levulinyl, and tert-butyldiphenylsilyl.
IT **211801-53-5P 211801-55-7P 211801-56-8P**
211801-58-0P 211801-64-8P 211801-65-9P
211801-69-3P 211801-72-8P 211801-73-9P
211801-74-0P 211801-75-1P
RL: RCT (Reactant); **SPN (Synthetic preparation)**; **PREP (Preparation)**; RACT (Reactant or reagent)
(assembly of **oligosaccharide** libraries with a designed **building block** and an efficient orthogonal protection-deprotection strategy)
IT **211801-59-1P 211801-62-6P**
RL: **SPN (Synthetic preparation)**; **PREP (Preparation)**
(assembly of **oligosaccharide** libraries with a designed **building block** and an efficient orthogonal protection-deprotection strategy)
IT **211800-85-0P 211800-88-3P 211800-92-9P**
211800-93-0P 211800-94-1P 211800-95-2P
211800-96-3P 211800-97-4P 211800-98-5P
211800-99-6P 211801-00-2P 211801-03-5P
211801-06-8P 211801-07-9P 211801-08-0P
211801-11-5P 211801-12-6P 211801-22-8P
211801-29-5P 211801-31-9P 211801-33-1P
211801-35-3P 211801-38-6P 211801-41-1P
211801-43-3P 211801-44-4P 211801-45-5P
211801-46-6P 211801-47-7P 211802-00-5P
RL: **SPN (Synthetic preparation)**; **PREP (Preparation)**
(synthesis of **oligosaccharides** using **building blocks** containing four selectively removable protecting groups as acceptors for glycosidation)
REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L101 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 05 Jan 1998
ACCESSION NUMBER: 1998:2314 CAPLUS
DOCUMENT NUMBER: 128:61693
TITLE: Synthesis of 1,2,3,4-tetra-O-(4-methoxyphenylmethyl)-α-D-glucopyranoside as a building block
AUTHOR(S): Kitahara, Haruo; Watanabe, Akira; Togawa, Kazuhiro
CORPORATE SOURCE: Dep. Natural Sci., Fac. Education, Hirosaki Univ., Hirosaki, Japan
SOURCE: Science Reports of the Hirosaki University (1997), 44(1), 65-68
CODEN: HUSRAK; ISSN: 0367-6439
PUBLISHER: Hirosaki University, Faculty of Science
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Synthetic routes are described for a new protecting glucopyranoside, 1,2,3,4-tetra-O-(4-methoxyphenylmethyl)-α-D-glucopyranoside. This compound was synthesized via six steps and may be interesting as a building block for the synthesis of oligosaccharides.
IT **69127-37-3P 200346-85-6P 200346-87-8P 200346-88-9P**
RL: RCT (Reactant); **SPN (Synthetic preparation); PREP (Preparation)**; RACT (Reactant or reagent)
(preparation of 1,2,3,4-tetra-O-(4-methoxyphenylmethyl)-D-glucopyranoside as an **oligosaccharide building block**)
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L101 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 04 Oct 1997
ACCESSION NUMBER: 1997:632616 CAPLUS
DOCUMENT NUMBER: 127:262935
TITLE: A simple access to lactose-derived building blocks required in glycoconjugate synthesis
AUTHOR(S): Lay, Luigi; Windmuller, Rainer; Reinhardt, Stefan; Schmidt, Richard R.
CORPORATE SOURCE: Fakultat Chemie, Univ. Konstanz, Konstanz, D-78434, Germany
SOURCE: Carbohydrate Research (1997), 303(1), 39-49
CODEN: CRBRAT; ISSN: 0008-6215
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Lactose was readily transformed into thexyldimethylsilyl (3,4-O-isopropylidene-β-D-galactopyranosyl)-(1→4)-β-D-glucopyranoside; this compound served as intermediate for the generation of partially O-protected lactose building blocks required in oligosaccharide and glycoconjugate synthesis. Thus, via per-O-benzoylation, desilylation, trichloroacetimidate formation, glycosylation of the Lemieux spacer, and acid-catalyzed de-O-isopropylidenation methoxycarbonyloctyl (2,6-di-O-benzoyl-β-D-galactopyranosyl)-(1→4)-2,3,6-tri-O-benzoyl-β-D-glucopyranoside was obtained. Regioselective benzoylation with benzoyl cyanide under various conditions afforded 3-O-, 2,3,2'-O-, 3,2'-O-, and 2,2'-O-unprotected lactoside, resp. De-O-isopropylidenation of the 3,2'-O-unprotected lactoside gave

thexyldimethylsilyl (6-O-benzoyl-β-D-galactopyranosyl)-(1→4)-2,6-di-O-benzoyl-β-D-glucopyranoside, an important 2',3',4'-O-unprotected lactose derivative Fucosylation of the 3-O-unprotected lactoside and then de-O-isopropylidenation afforded thexyldimethylsilyl (2,6-di-O-benzoyl-β-D-galactopyranosyl)-(1→4)-[(3,4-di-O-acetyl-2-O-benzoyl-α-L-fucopyranosyl)-(1→3)]-2,6-di-O-benzoyl-β-D-glucopyranoside, an important fucosyllactose building block.

IT **160720-83-2P 191034-33-0P**
RL: RCT (Reactant); **SPN (Synthetic preparation)**; **PREP (Preparation)**; RACT (Reactant or reagent)
(preparation of lactose-derived **building blocks** required in **glycoconjugate** synthesis)

IT **160720-73-0P**
RL: **SPN (Synthetic preparation)**; **PREP (Preparation)**
(preparation of lactose-derived **building blocks** required in **glycoconjugate** synthesis)

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L101 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 22 Feb 1997
ACCESSION NUMBER: 1997:123442 CAPLUS
DOCUMENT NUMBER: 126:238580
TITLE: Glycosyl azides as building blocks in convergent syntheses of oligomeric lactosamine and Lewisx saccharides
AUTHOR(S): Broeder, Wolfgang; Kunz, Horst
CORPORATE SOURCE: Institut fur Organische Chemie, Johannes Gutenberg-Universitat Mainz, Mainz, D-55128, Germany
SOURCE: Bioorganic & Medicinal Chemistry (1997), 5(1), 1-19
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Oligosaccharides containing type 2 lactosamine repeating units, e.g. neo-lacto-octaose and trimeric Lewisx derivs., are constructed using neo-lactosamine azide building blocks. The azido group provides a favorable protection of the anomeric position which is stable to versatile protecting group manipulations and glycosylation reactions. On the other hand, glycosyl azides can be converted into glycosyl fluorides via a 1,3-dipolar cycloaddn. with di-tert-butyl-acetylenedicarboxylate and subsequent treatment of the resulting N-glycosyl triazoles with hydrogen fluoride-pyridine complex. Activation of the lactosamine fluorides with Lewis acids affords the possibility to extend the oligosaccharide chain with disaccharide units. Suitable protecting group combinations within the galactose and the glucosamine portion of the lactosamine unit enable selective deprotection reactions and, subsequently, chain extension or branching, e.g. to yield Lewisx structures.

IT **188398-91-6P 188399-12-4P 188399-13-5P 188399-14-6P 188399-15-7P 188399-18-0P**
RL: RCT (Reactant); **SPN (Synthetic preparation)**; **PREP (Preparation)**; RACT (Reactant or reagent)
(glycosyl azides as **building blocks** in convergent syntheses of oligomeric lactosamine and Lewis x **oligosaccharides**)

IT **188398-92-7P**
RL: **SPN (Synthetic preparation); PREP (Preparation)**
(glycosyl azides as **building blocks** in convergent syntheses of oligomeric lactosamine and Lewis x **oligosaccharides**)
REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

FILE 'REGISTRY' ENTERED AT 12:00:49 ON 08 NOV 2004
L102 91 SEA FILE=REGISTRY ABB=ON PLU=ON (151072-06-9/BI OR 152389-14-5/BI OR 160720-73-0/BI OR 160720-83-2/BI OR 188398-91-6/BI OR 188398-92-7/BI OR 188399-12-4/BI OR 188399-13-5/BI OR 188399-14-6/BI OR 188399-15-7/BI OR 188399-18-0/BI OR 191034-33-0/BI OR 200346-85-6/BI OR 200346-87-8/BI OR 200346-88-9/BI OR 211800-85-0/BI OR 211800-88-3/BI OR 211800-92-9/BI OR 211800-93-0/BI OR 211800-94-1/BI OR 211800-95-2/BI OR 211800-96-3/BI OR 211800-97-4/BI OR 211800-98-5/BI OR 211800-99-6/BI OR 211801-00-2/BI OR 211801-03-5/BI OR 211801-06-8/BI OR 211801-07-9/BI OR 211801-08-0/BI OR 211801-11-5/BI OR 211801-12-6/BI OR 211801-22-8/BI OR 211801-29-5/BI OR 211801-31-9/BI OR 211801-33-1/BI OR 211801-35-3/BI OR 211801-38-6/BI OR 211801-41-1/BI OR 211801-43-3/BI OR 211801-44-4/BI OR 211801-45-5/BI OR 211801-46-6/BI OR 211801-47-7/BI OR 211801-53-5/BI OR 211801-55-7/BI OR 211801-56-8/BI OR 211801-58-0/BI OR 211801-59-1/BI OR 211801-62-6/BI OR 211801-64-8/BI OR 211801-65-9/BI OR 211801-69-3/BI OR 211801-72-8/BI OR 211801-73-9/BI OR 211801-74-0/BI OR 211801-75-1/BI OR 211802-00-5/BI OR 243469-45-6/BI OR 244286-77-9/BI OR 250335-03-6/BI OR 250335-04-7/BI OR 253683-35-1/BI OR 253683-36-2/BI OR 254442-16-5/BI OR 259742-11-5/BI OR 282526-21-0/BI OR 282526-22-1/BI OR 282526-23-2/BI OR 309913-14-2/BI OR 309913-15-3/BI OR 309913-16-4/BI OR 309913-17-5/BI OR 309913-18-6/BI OR 309913-19-7/BI OR 309913-20-0/BI OR 309913-21-1/BI OR 309913-22-2/BI OR 330457-52-8/BI OR 330457-55-1/BI OR 342640-48-6/BI OR 342640-49-7/BI OR 342640-50-0/BI OR 342640-51-1/BI OR 478062-63-4/BI OR 478062-65-6/BI OR 478062-66-7/BI OR 478062-67-8/BI OR 478062-68-9/BI OR 5346-81-6/BI OR 69127-37-3/BI)

Random RNs displayed

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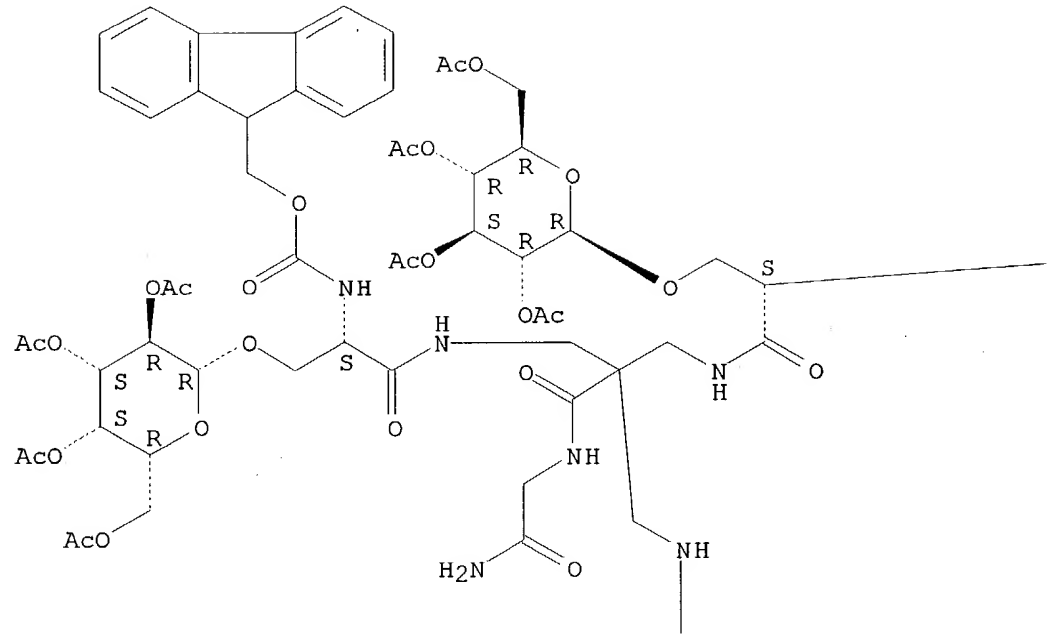
L102 ANSWER 1 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN
RN **478062-68-9** REGISTRY
CN Glycinamide, N-[(9H-fluoren-9-ylmethoxy)carbonyl]-O-(2,3,4,6-tetra-O-acetyl-β-D-galactopyranosyl)-L-seryl-2-[[[(2S)-2-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-1-oxo-3-[(2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl)oxy]propyl]amino]methyl]-2-[[[(2S)-2-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-1-oxo-3-[(2,3,4-tri-O-acetyl-β-D-ribopyranosyl)oxy]propyl]amino]methyl]-β-alanyl- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C100 H112 N8 O39
SR CA
LC STN Files: CA, CAPLUS, CASREACT
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation)

Absolute stereochemistry.

PAGE 1-A



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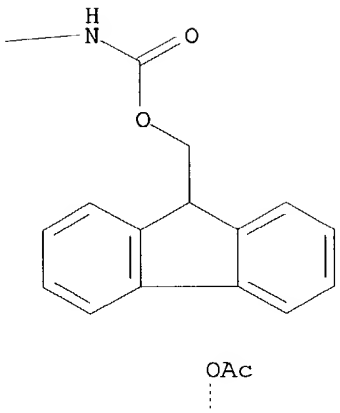
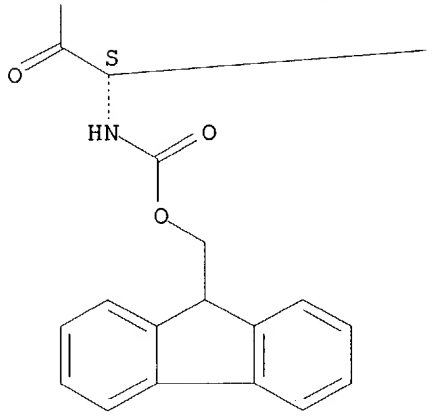
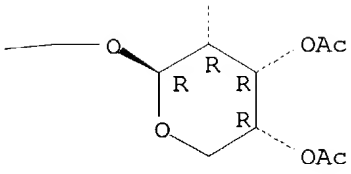


Searcher : Shears 571-272-2528

PAGE 2-A



PAGE 2-B

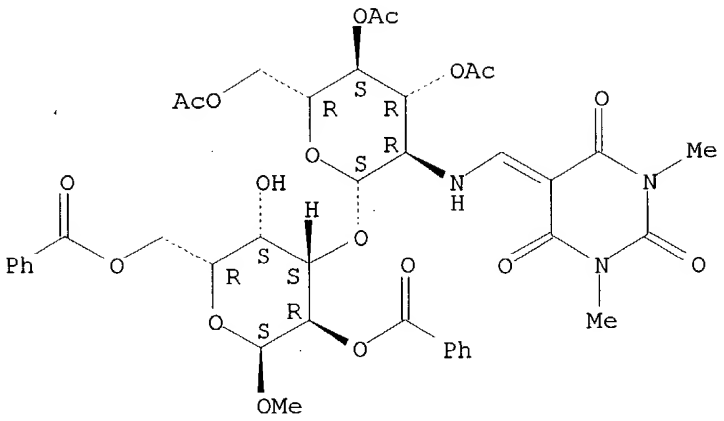


1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:24924

L102 ANSWER 6 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN
RN **342640-51-1** REGISTRY
CN α-D-Galactopyranoside, methyl 3-O-[3,4,6-tri-O-acetyl-2-deoxy-2-[[(tetrahydro-1,3-dimethyl-2,4,6-trioxo-5(2H)-pyrimidinylidene)methyl]amino]-β-D-glucopyranosyl]-, 2,6-dibenzoate (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C40 H45 N3 O18
SR CA
LC STN Files: CA, CAPLUS, CASREACT
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

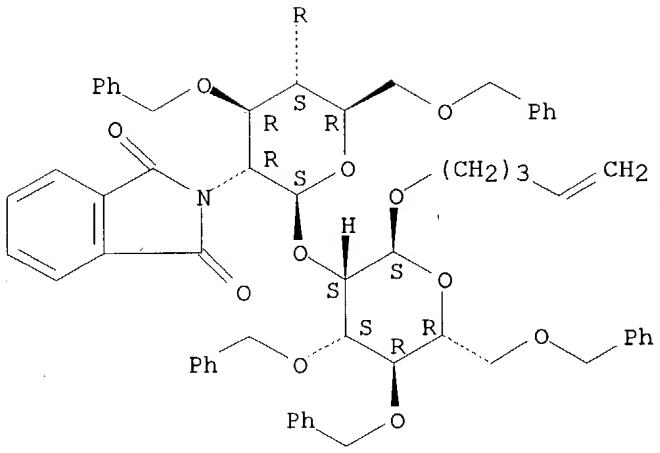
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 135:19843

L102 ANSWER 10 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN
RN **330457-55-1** REGISTRY
CN α-D-Mannopyranoside, 4-pentenyl O-2-O-(2,2-dimethyl-1-oxopropyl)-3,4,6-tris-O-(phenylmethyl)-β-D-galactopyranosyl-(1→4)-O-2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-3,6-bis-O-(phenylmethyl)-β-D-glucopyranosyl-(1→2)-3,4,6-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C92 H99 N O18
SR CA
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: PREP (Preparation)
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.

PAGE 1-A



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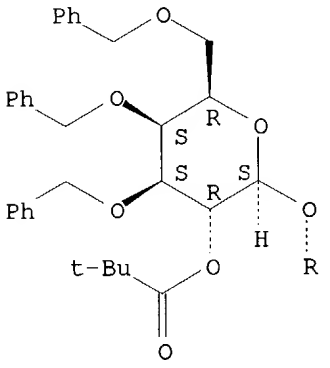


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:271086

REFERENCE 2: 136:184053

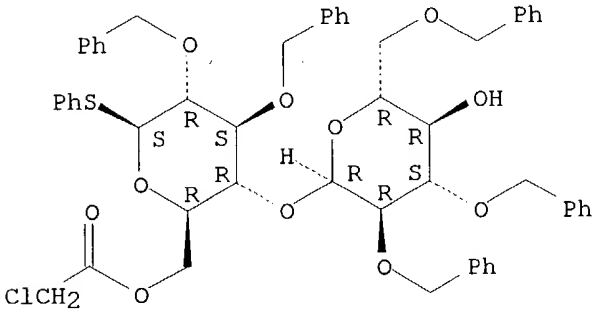
REFERENCE 3: 134:237716

L102 ANSWER 12 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN
RN **309913-22-2** REGISTRY
CN β-D-Glucopyranoside, phenyl 2,3-bis-O-(phenylmethyl)-1-thio-4-O-[2,3,6-tris-O-(phenylmethyl)-α-D-glucopyranosyl]-, 6-(chloroacetate) (9CI) (CA INDEX NAME)

Searcher : Shears 571-272-2528

FS STEREOSEARCH
MF C55 H57 Cl O11 S
SR CA
LC STN Files: CA, CAPLUS, CASREACT
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation)

Absolute stereochemistry. Rotation (+).



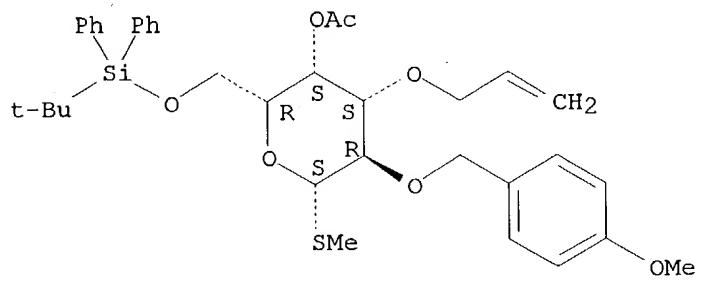
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:17644

L102 ANSWER 21 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN
RN **282526-23-2** REGISTRY
CN β-D-Galactopyranoside, methyl 6-O-[(1,1-dimethylethyl)diphenylsilyl]-2-O-[(4-methoxyphenyl)methyl]-3-O-2-propenyl-1-thio-, acetate (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C36 H46 O7 S Si
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation)

Absolute stereochemistry.



Searcher : Shears 571-272-2528

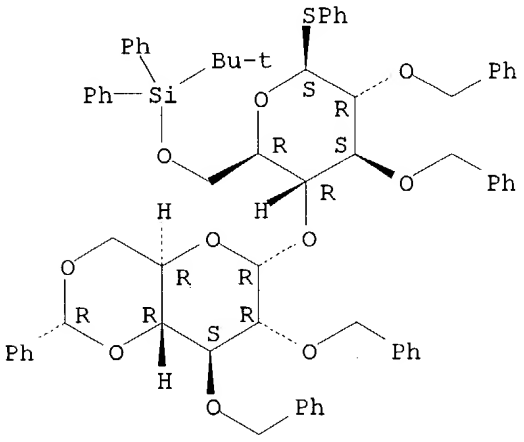
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 133:105256

L102 ANSWER 24 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN
RN **259742-11-5** REGISTRY
CN β-D-Glucopyranoside, phenyl 4-O-[2,3-bis-O-(phenylmethyl)-4,6-O-[(R)-phenylmethylene]-α-D-glucopyranosyl]-6-O-[(1,1-dimethylethyl)diphenylsilyl]-2,3-bis-O-(phenylmethyl)-1-thio- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C69 H72 O10 S Si
SR CA
LC STN Files: CA, CAPLUS, CASREACT
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry. Rotation (+).



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3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:73438

REFERENCE 2: 134:17644

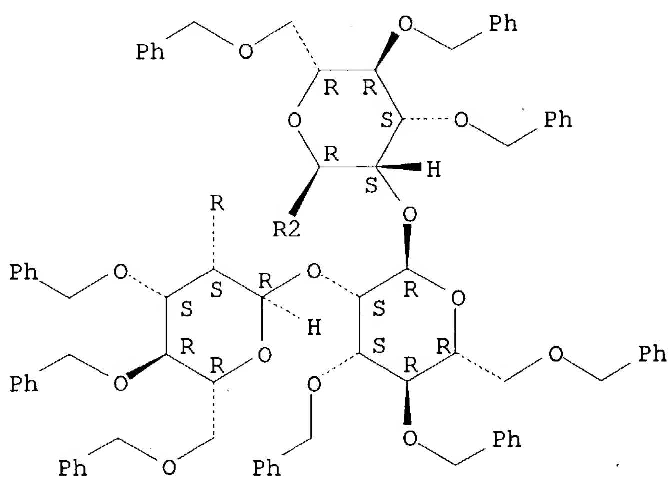
REFERENCE 3: 132:194574

L102 ANSWER 26 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN
RN **253683-36-2** REGISTRY

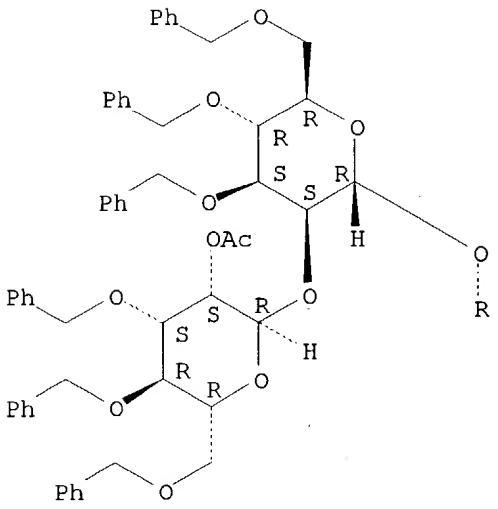
CN   α-D-Mannopyranoside, 4-pentenyl O-2-O-acetyl-3,4,6-tris-O-
(phenylmethyl)-α-D-mannopyranosyl-(1→2)-O-3,4,6-tris-O-
(phenylmethyl)-α-D-mannopyranosyl-(1→2)-O-3,4,6-tris-O-
(phenylmethyl)-α-D-mannopyranosyl-(1→2)-O-3,4,6-tris-O-
(phenylmethyl)-α-D-mannopyranosyl-(1→2)-O-3,4,6-tris-O-
(phenylmethyl)-α-D-mannopyranosyl-(1→2)-O-3,4,6-tris-O-
(phenylmethyl)-α-D-mannopyranosyl-(1→2)-3,4,6-tris-O-
(phenylmethyl)- (9CI) (CA INDEX NAME)
FS   STEREOSEARCH
MF   C196 H208 O37
SR   CA
LC   STN Files: CA, CAPLUS, CASREACT
DT.CA   CAplus document type: Journal
RL.NP   Roles from non-patents: PREP (Preparation)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



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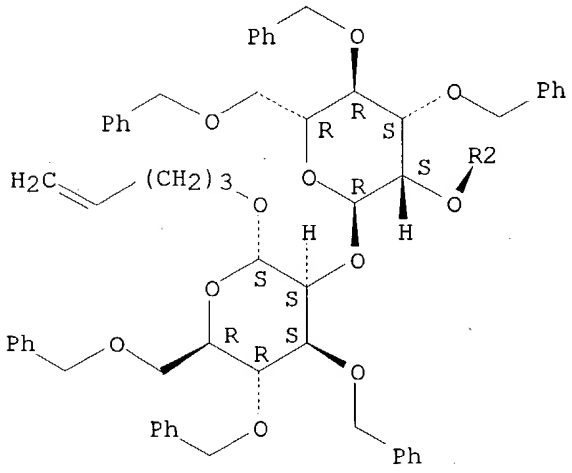


3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:271086

REFERENCE 2: 134:237716

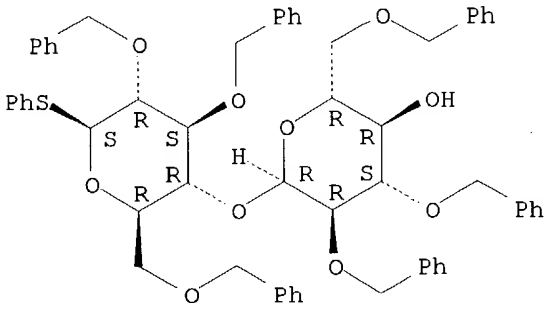
REFERENCE 3: 132:93556

L102 ANSWER 28 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN
RN **250335-04-7** REGISTRY

Searcher : Shears 571-272-2528

CN β-D-Glucopyranoside, phenyl 2,3,6-tris-O-(phenylmethyl)-1-thio-4-O-[2,3,6-tris-O-(phenylmethyl)-α-D-glucopyranosyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C60 H62 O10 S
SR CA
LC STN Files: CA, CAPLUS, CASREACT
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

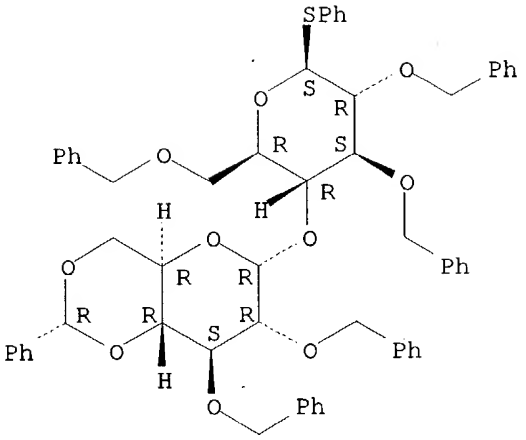
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:17644

REFERENCE 2: 132:35963

L102 ANSWER 30 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN
RN **244286-77-9** REGISTRY
CN β-D-Glucopyranoside, phenyl 4-O-[2,3-bis-O-(phenylmethyl)-4,6-O-[(R)-phenylmethylene]-α-D-glucopyranosyl]-2,3,6-tris-O-(phenylmethyl)-1-thio- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C60 H60 O10 S
SR CA
LC STN Files: CA, CAPLUS, CASREACT
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry. Rotation (+).



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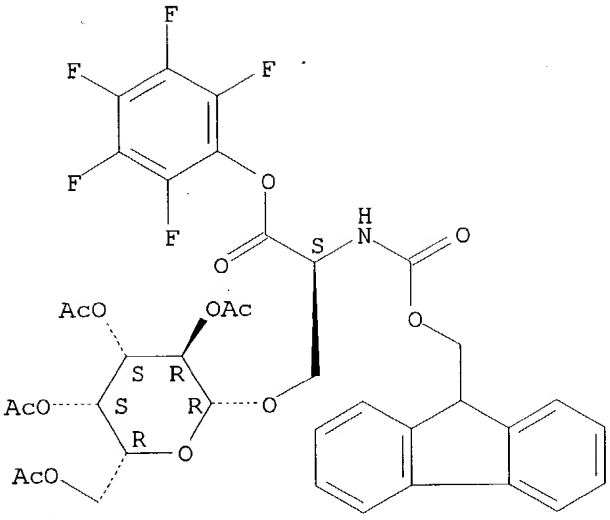
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:17644

REFERENCE 2: 131:243478

L102 ANSWER 31 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN
RN **243469-45-6** REGISTRY
CN L-Serine, N-[(9H-fluoren-9-ylmethoxy)carbonyl]-O-(2,3,4,6-tetra-O-acetyl-β-D-galactopyranosyl)-, pentafluorophenyl ester (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C38 H34 F5 N O14
SR CA
LC STN Files: CA, CAPLUS, CASREACT
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.



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3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:24924

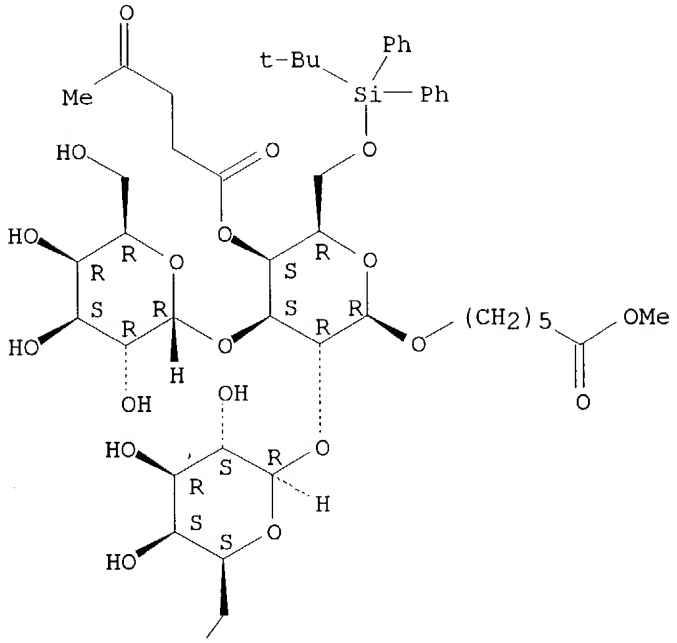
REFERENCE 2: 133:223015

REFERENCE 3: 131:214543

L102 ANSWER 32 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN
RN **211802-00-5** REGISTRY
CN Hexanoic acid, 6-[[O-α-D-galactopyranosyl-(1→3)-O-[β-L-galactopyranosyl-(1→2)]-6-O-[(1,1-dimethylethyl)diphenylsilyl]-4-O-(1,4-dioxopentyl)-β-D-galactopyranosyl]oxy]-, methyl ester (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C46 H68 O20 Si
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation)

Absolute stereochemistry.

PAGE 1-A



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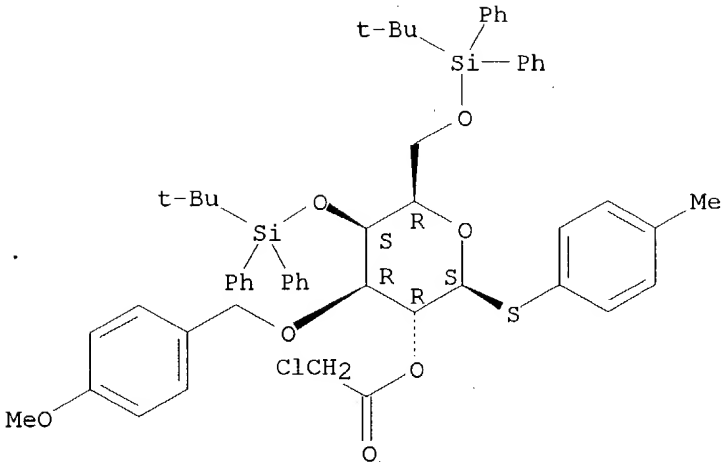
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:189556

L102 ANSWER 33 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN
RN **211801-75-1** REGISTRY
CN β-D-Galactopyranoside, 4-methylphenyl 4,6-bis-O-[(1,1-dimethylethyl)diphenylsilyl]-3-O-[(4-methoxyphenyl)methyl]-1-thio-, chloroacetate (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C55 H63 Cl O7 S Si2
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.



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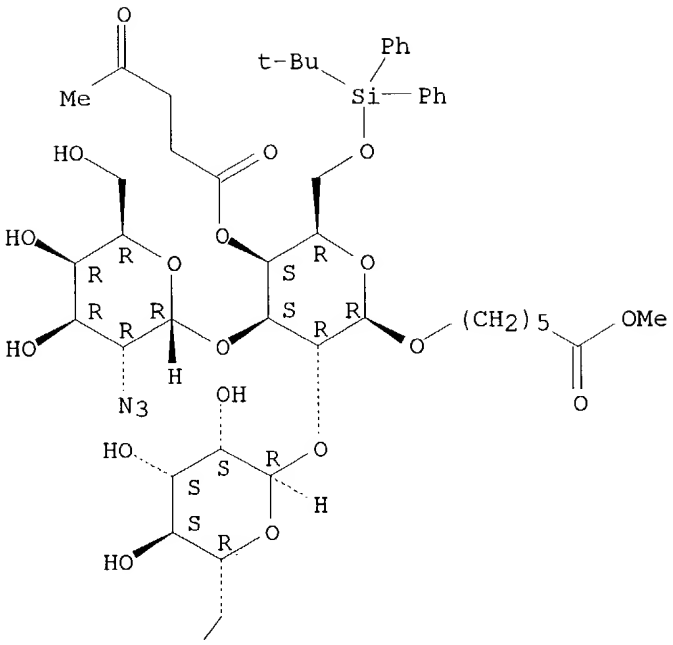
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:189556

L102 ANSWER 65 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN
RN **211800-99-6** REGISTRY
CN Hexanoic acid, 6-[[O-2-azido-2-deoxy-α-D-galactopyranosyl-(1→3)-O-[α-D-mannopyranosyl-(1→2)]-6-O-[(1,1-dimethylethyl)diphenylsilyl]-4-O-(1,4-dioxopentyl)-β-D-galactopyranosyl]oxy]-, methyl ester (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C46 H67 N3 O19 Si
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation)

Absolute stereochemistry.

PAGE 1-A



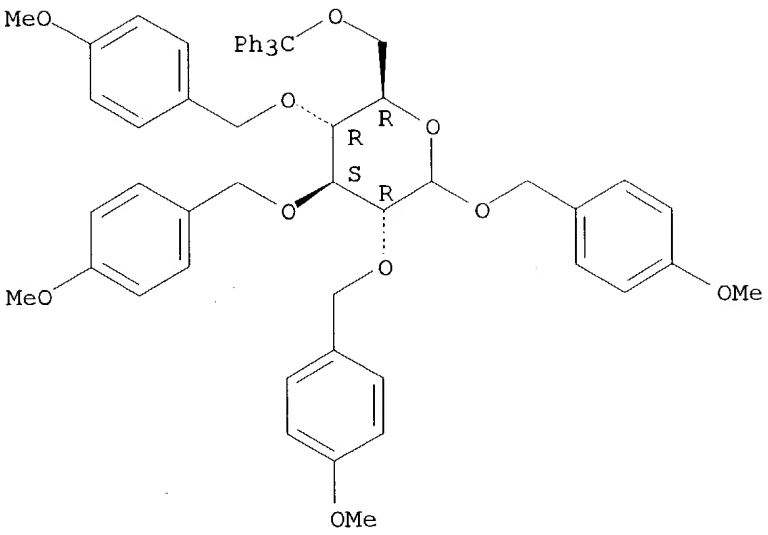
PAGE 2-A

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:189556

L102 ANSWER 75 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN
RN **200346-88-9** REGISTRY
CN D-Glucopyranoside, (4-methoxyphenyl)methyl 2,3,4-tris-O-[(4-methoxyphenyl)methyl]-6-O-(triphenylmethyl)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C57 H58 O10
SR CA
LC STN Files: CA, CAPLUS, CASREACT
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.



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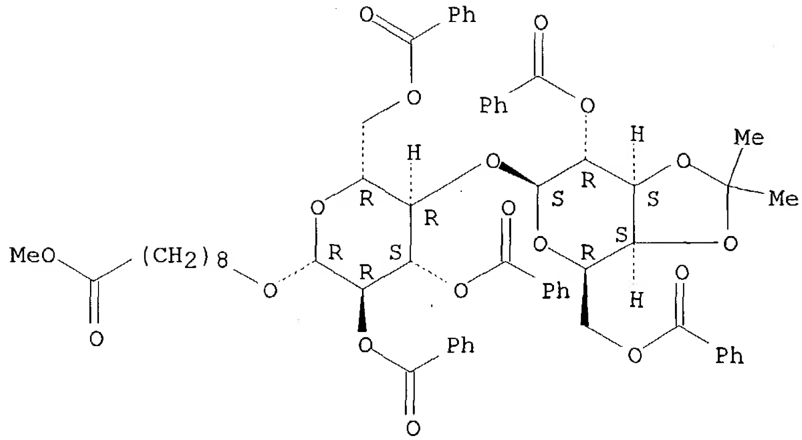
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 131:166989

REFERENCE 2: 128:61693

L102 ANSWER 78 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN
RN **191034-33-0** REGISTRY
CN Nonanoic acid, 9-[[2,3,6-tri-O-benzoyl-4-O-[2,6-di-O-benzoyl-3,4-O-(1-methylethylidene)-β-D-galactopyranosyl]-β-D-glucopyranosyl]oxy]-, methyl ester (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C60 H64 O18
SR CA
LC STN Files: CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1907 TO DATE)
5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 137:311100

REFERENCE 2: 137:6354

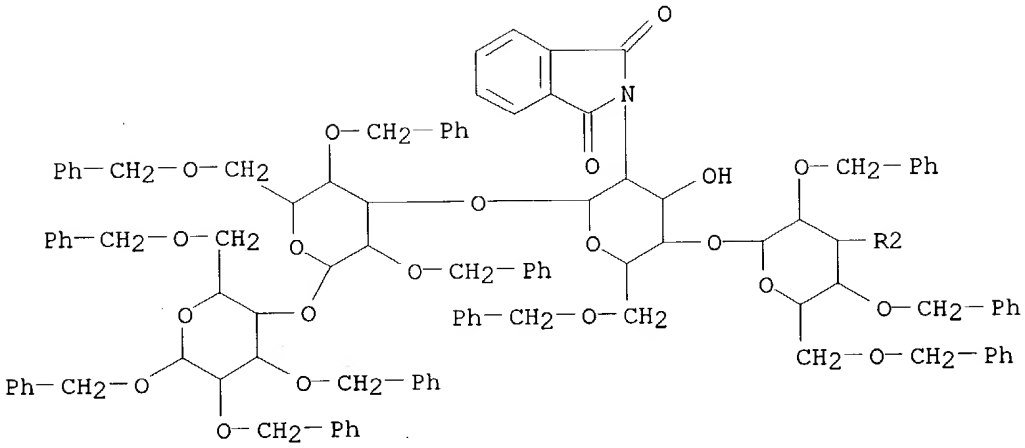
REFERENCE 3: 130:168603

REFERENCE 4: 127:262935

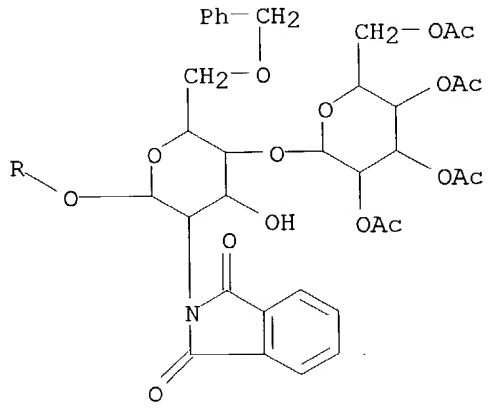
REFERENCE 5: 127:50946

L102 ANSWER 79 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN
RN **188399-18-0** REGISTRY
CN β-D-Glucopyranoside, phenylmethyl O-2,3,4,6-tetra-O-acetyl-β-D-galactopyranosyl-(1→4)-O-2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-6-O-(phenylmethyl)-β-D-glucopyranosyl-(1→3)-O-2,4,6-tris-O-(phenylmethyl)-β-D-galactopyranosyl-(1→4)-O-2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-6-O-(phenylmethyl)-β-D-glucopyranosyl-(1→3)-O-2,4,6-tris-O-(phenylmethyl)-β-D-galactopyranosyl-(1→4)-O-2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-6-O-(phenylmethyl)-β-D-glucopyranosyl-(1→3)-O-2,4,6-tris-O-(phenylmethyl)-β-D-galactopyranosyl-(1→4)-2,3,6-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C192 H195 N3 O48
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

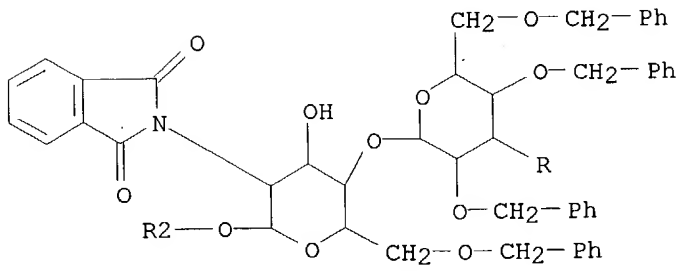
PAGE 1-A



PAGE 2-A



PAGE 3-A



Searcher : Shears 571-272-2528

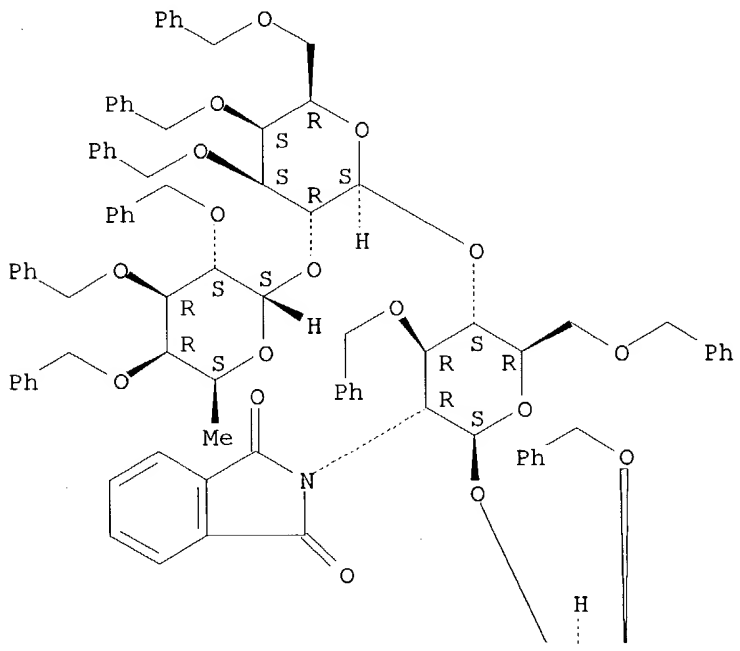
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 126:238580

L102 ANSWER 84 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN
RN **188398-92-7** REGISTRY
CN β-D-Glucopyranoside, phenylmethyl O-6-deoxy-2,3,4-tris-O-(phenylmethyl)-α-L-galactopyranosyl-(1→2)-O-3,4,6-tris-O-(phenylmethyl)-β-D-galactopyranosyl-(1→4)-O-2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-3,6-bis-O-(phenylmethyl)-β-D-glucopyranosyl-(1→3)-O-2,4,6-tris-O-(phenylmethyl)-β-D-galactopyranosyl-(1→4)-2,3,6-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C143 H145 N O26
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation)

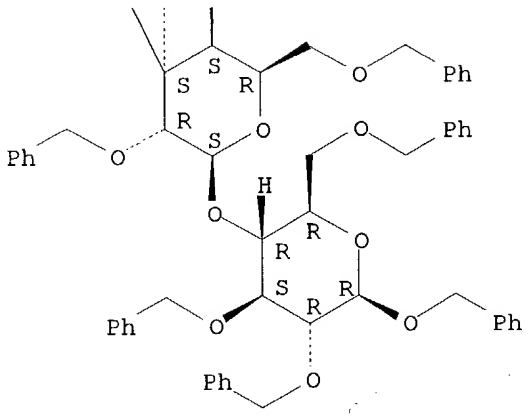
Absolute stereochemistry. Rotation (-).

PAGE 1-A



Searcher : Shears 571-272-2528

PAGE 2-A

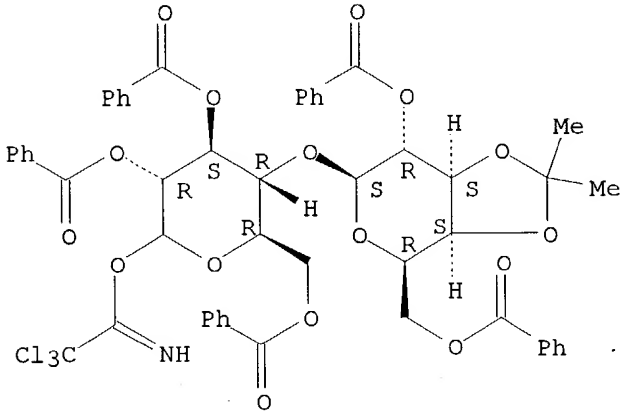


1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 126:238580

L102 ANSWER 86 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN
RN **160720-83-2** REGISTRY
CN D-Glucopyranose, 4-O-[2,6-di-O-benzoyl-3,4-O-(1-methylethylidene)-β-D-galactopyranosyl]-, 2,3,6-tribenzoate 1-(2,2,2-trichloroethanimidate) (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C52 H46 Cl3 N O16
SR CA
LC STN Files: CA, CAPLUS, CASREACT
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

Searcher : Shears 571-272-2528

3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

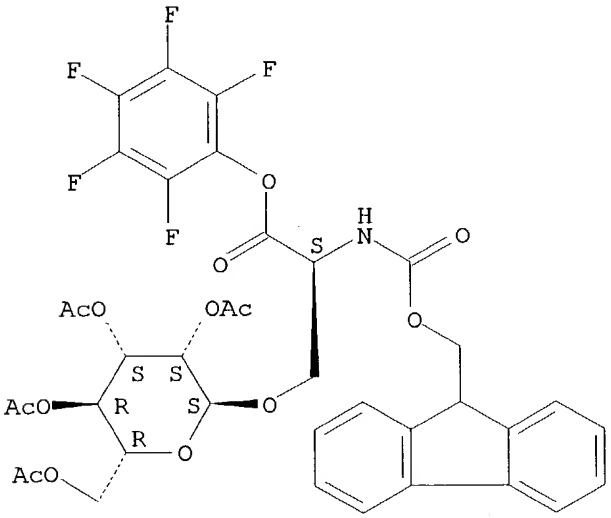
REFERENCE 1: 132:50181

REFERENCE 2: 127:262935

REFERENCE 3: 122:106326

L102 ANSWER 88 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN
RN **152389-14-5** REGISTRY
CN L-Serine, N-[(9H-fluoren-9-ylmethoxy)carbonyl]-O-(2,3,4,6-tetra-O-acetyl-α-D-mannopyranosyl)-, pentafluorophenyl ester (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C38 H34 F5 N O14
SR CA
LC STN Files: CA, CAPLUS, CASREACT
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:24924

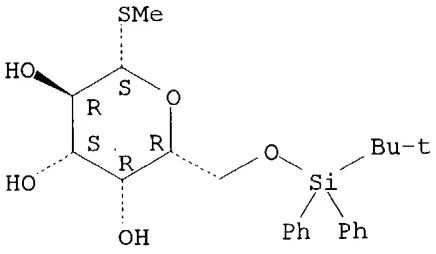
REFERENCE 2: 134:296073

REFERENCE 3: 120:77621

Searcher : Shears 571-272-2528

L102 ANSWER 89 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN
RN **151072-06-9** REGISTRY
CN β-D-Galactopyranoside, methyl 6-O-[(1,1-dimethylethyl)diphenylsilyl]-1-thio- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C23 H32 O5 S Si
SR CA
LC STN Files: CA, CAPLUS, CASREACT
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 135:33628

REFERENCE 2: 133:105256

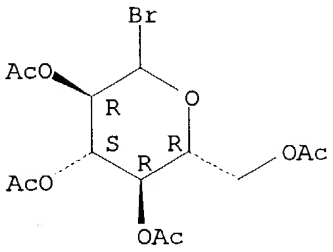
REFERENCE 3: 131:228893

REFERENCE 4: 119:250313

L102 ANSWER 90 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN
RN **69127-37-3** REGISTRY
CN D-Glucopyranosyl bromide, tetraacetate (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2,3,4,6-Tetra-O-acetyl-D-glucopyranosyl bromide
CN D-Glucosyl bromide, tetraacetate
CN Glucopyranosyl bromide, tetraacetate
FS STEREOSEARCH
DR 102339-89-9, 80513-25-3
MF C14 H19 Br O9
LC STN Files: BEILSTEIN*, BIOBUSINESS, CA, CAOLD, CAPLUS, CASREACT, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation);

PROC (Process); RACT (Reactant or reagent); NORL (No role in record)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

91 REFERENCES IN FILE CA (1907 TO DATE)
91 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:38808

REFERENCE 2: 140:219548

REFERENCE 3: 140:27827

REFERENCE 4: 139:381519

REFERENCE 5: 139:365141

REFERENCE 6: 138:122769

REFERENCE 7: 137:6325

REFERENCE 8: 136:263350

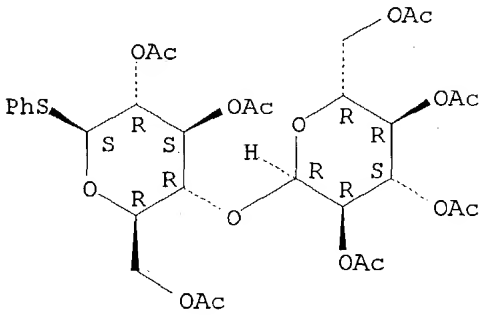
REFERENCE 9: 135:371903

REFERENCE 10: 135:362368

L102 ANSWER 91 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN
RN **5346-81-6** REGISTRY
CN β-D-Glucopyranoside, phenyl 4-O-(2,3,4,6-tetra-O-acetyl-α-D-glucopyranosyl)-1-thio-, triacetate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Glucopyranoside, phenyl 4-O-α-D-glucopyranosyl-1-thio-, heptaacetate, β-D- (8CI)
OTHER NAMES:
CN NSC 232027
FS STEREOSEARCH
MF C32 H40 O17 S
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: RACT (Reactant or reagent)

RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

12 REFERENCES IN FILE CA (1907 TO DATE)
12 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:391419

REFERENCE 2: 138:287940

REFERENCE 3: 138:73438

REFERENCE 4: 134:17644

REFERENCE 5: 132:194574

REFERENCE 6: 125:276325

REFERENCE 7: 125:9849

REFERENCE 8: 115:256489

REFERENCE 9: 109:55099

REFERENCE 10: 101:146746

FILE 'CAOLD' ENTERED AT 12:02:54 ON 08 NOV 2004
L103 8 S L102

L103 ANSWER 1 OF 8 CAOLD COPYRIGHT 2004 ACS on STN
AN CA55:20967c CAOLD
TI S-oxides of sugar thioacetals and a new glucoside synthesis
AU Kuhn, Richard; Baschang-Bister, W.
IT 962-53-8 3055-46-7 5517-54-4 38178-46-0 51023-63-3 89886-06-6
89886-08-8 93302-26-2 100016-91-9 **102339-89-9** 109428-47-9
112484-74-9 112716-08-2 113091-51-3 113114-28-6 113114-78-6 114889-92-8
115799-07-0 115799-08-1 115799-09-2

L103 ANSWER 2 OF 8 CAOLD COPYRIGHT 2004 ACS on STN

AN CA54:12003c CAOLD
TI preparation of monomeric fructose nitrates
AU Sarel-Imber, Meira; Leibowitz, J.
IT **102339-89-9** 108489-40-3 114510-21-3 115799-10-5 117608-65-8
120746-71-6

L103 ANSWER 3 OF 8 CAOLD COPYRIGHT 2004 ACS on STN
AN CA54:1328f CAOLD
TI action of dimethyl sulfoxide in O-acetylglycosyl bromides
AU Srivastava, Harris C.
IT 3068-31-3 13007-37-9 55018-54-7 **102339-89-9**

L103 ANSWER 4 OF 8 CAOLD COPYRIGHT 2004 ACS on STN
AN CA53:21677g CAOLD
TI synthesis of 3-O-α-D-glucopyranosyl-D-glucose sakeboise or nigeroseu
- (I) reaction of 1,2,5,6-di-O-isopropylidene-D-glucofuranose and
2,3,4,6-tetra-O-acetyl-α-D-glucopyranosyl bromide
AU Matsuda, Kazuo; Sekiguchi, T.
IT **102339-89-9**

L103 ANSWER 5 OF 8 CAOLD COPYRIGHT 2004 ACS on STN
AN CA53:6092e CAOLD
TI preparation of acetobromo sugars
AU Weygand, Friedrich; Ziemann, H.; Bestmann, H. J.
IT 5160-12-3 7505-49-9 102129-62-4 **102339-89-9** 109910-18-1

L103 ANSWER 6 OF 8 CAOLD COPYRIGHT 2004 ACS on STN
AN CA53:1162f CAOLD
TI glucosylation of acetylenes
AU Zelinski, Robert; Meyer, R. E.
IT 6736-97-6 6738-06-3 79744-06-2 **102339-89-9** 108844-74-2
109010-44-8 114421-40-8 116257-27-3 122703-50-8

L103 ANSWER 7 OF 8 CAOLD COPYRIGHT 2004 ACS on STN
AN CA52:1072e CAOLD
TI reaction of 2,3,4,6-tetraacetyl-α-D-glucopyranosyl bromide with
mercaptans
AU Stanek, Jaroslav; Malkovsky, K.; Novak, M.; Petricek, D.
IT 6605-39-6 6612-63-1 6697-87-6 10343-13-2 30657-67-1 64495-83-6
66108-02-9 70518-88-6 70569-27-6 84534-34-9 93711-40-1
102339-89-9 119250-07-6

L103 ANSWER 8 OF 8 CAOLD COPYRIGHT 2004 ACS on STN
AN CA51:227h CAOLD
TI reactivity of the O-acylglycosyl halides - (IV) solvolytic reactions of
O-acetyl-α-D-glycosyl-1-halides in the presence of electrophilic
catalysts
AU Mattok, G. L.; Phillips, G. O.
IT 572-10-1 **102339-89-9**

FILE 'USPATFULL' ENTERED AT 12:03:15 ON 08 NOV 2004
L104 17 S L102

L104 ANSWER 1 OF 17 USPATFULL on STN
ACCESSION NUMBER: 2004:32059 USPATFULL
TITLE: Programmable one-pot oligosaccharide synthesis

INVENTOR(S): Wong, Chi-Huey, Rancho Santa Fe, CA, UNITED STATES
Zhang, Zhiyuan, San Diego, CA, UNITED STATES
Ollman, Ian, Foster City, CA, UNITED STATES
Baasov, Timor, Haifa, IL, UNITED STATES
Ye, Xin-Shan, Beijing, CHINA

PATENT ASSIGNEE(S): The Scripps Research Institute, La Jolla, CA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004024201	A1	20040205
APPLICATION INFO.:	US 2003-400090	A1	20030325 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2001-762377, filed on 10 Jul 2001, GRANTED, Pat. No. US 6538117 A 371 of International Ser. No. WO 1999-US18151, filed on 10 Aug 1999, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-96001P	19980810 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: THE SCRIPPS RESEARCH INSTITUTE, OFFICE OF PATENT COUNSEL, TPC-8, 10550 NORTH TORREY PINES ROAD, LA JOLLA, CA, 92037
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 32 Drawing Page(s)
LINE COUNT: 2477
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The reactivity of a number of p-methylphenyl thioglycoside (STol) donors which are either fully protected or have one hydroxyl group exposed has been quantitatively determined by HPLC in conjunction with the development of a broadly applicable approach for a facile one-pot synthesis of oligosaccharides. The influence on reactivity of the structural effects of different monosaccharide cores and different protecting groups on each glycoside donor is characterized and quantified. In addition, a correlation between glycosyl donor reactivity and the chemical shift of the anomeric proton by 1 H NMR has been established. A database of thioglycosides as glycosyl donors has been created using this reactivity data. The utility is demonstrated by the easy and rapid one-pot assembly of various linear and branched oligosaccharide structures. In addition, a computer program as been described for use as a database search tool and guide for the selection of building blocks for the one-pot assembly of a desired oligosaccharide or a library of individual oligosaccharides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 2 OF 17 USPATFULL on STN
ACCESSION NUMBER: 2003:294853 USPATFULL
TITLE: Sulphonamide derivatives as prodrugs of aspartyl protease inhibitors
INVENTOR(S): Tung, Roger Dennis, Beverly, MA, UNITED STATES
Hale, Michael Robin, Bedford, MA, UNITED STATES
Baker, Christopher Todd, Waltham, MA, UNITED STATES

Furfine, Eric Steven, Durham, NC, UNITED STATES
Kaldor, Istvan, Durham, NC, UNITED STATES
Kazmierski, Wieslaw Mieczylaw, Raleigh, NC, UNITED STATES
Spaltenstein, Andrew, Raleigh, NC, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003207871	A1	20031106
APPLICATION INFO.:	US 2003-370171	A1	20030219 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2000-602494, filed on 23 Jun 2000, GRANTED, Pat. No. US 6559137 Continuation of Ser. No. WO 1998-US4595, filed on 9 Mar 1998, PENDING Continuation-in-part of Ser. No. US 1997-998050, filed on 24 Dec 1997, GRANTED, Pat. No. US 6436989

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FISH & NEAVE, 1251 AVENUE OF THE AMERICAS, 50TH FLOOR, NEW YORK, NY, 10020-1105
NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 1
LINE COUNT: 2045
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to prodrugs of a class of sulfonamides which are aspartyl protease inhibitors. In one embodiment, this invention relates to a novel class of prodrugs of HIV aspartyl protease inhibitors characterized by favorable aqueous solubility, high oral bioavailability and facile in vivo generation of the active ingredient. This invention also relates to pharmaceutical compositions comprising these prodrugs. The prodrugs and pharmaceutical compositions of this invention are particularly well suited for decreasing the pill burden and increasing patient compliance. This invention also relates to methods of treating mammals with these prodrugs and pharmaceutical compositions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 3 OF 17 USPATFULL on STN
ACCESSION NUMBER: 2003:201363 USPATFULL
TITLE: Benzophenone alpha-d-glycopyranosides, preparation and therapeutic use
INVENTOR(S): Lebreton, Luc, Dijon, FRANCE
Legendre, Christiane, Velars-sur-Ouche, FRANCE
Samreth, Soth, Daix, FRANCE

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003139349	A1	20030724
APPLICATION INFO.:	US 2002-168210	A1	20020905 (10)
	WO 2000-FR3420		20001206

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1

LINE COUNT: 388
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention concerns (i) [4-(4-cyanobenzyl)phenyl]α-D-glycopyranosides of formula (I) wherein: the group α-D-glycopyranosyl R represents a α-D-glycopyranosyl, α-D-galactopyranosyl. α-D-mannopyranosyl, α-D-arabinopyranosyl, α-D-lyxopyranosyl, or α-D-ribopyranosyl group: (ii) their esters resulting from the esterification of at least a OH function of each pyranosyl group with a C.sub.2-C.sub.4 alkanoic or a cycloalkanoic acid, as novel industrial products. Said novel [4-(4-cyanobenzyl)phenyl]α-D-glycopyranosides are useful in therapy for fighting against atheromatous plaque.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 4 OF 17 USPATFULL on STN
ACCESSION NUMBER: 2003:123339 USPATFULL
TITLE: Sulphonamide derivatives as prodrugs of aspartyl protease inhibitors
INVENTOR(S): Tung, Roger Dennis, Beverly, MA, United States
Hale, Michael Robin, Bedford, MA, United States
Baker, Christopher Todd, Waltham, MA, United States
Furfine, Eric Steven, Durham, NC, United States
Kaldor, Istvan, Durham, NC, United States
Kazmierski, Wieslaw Mieczylaw, Raleigh, NC, United States
Spaltenstein, Andrew, Raleigh, NC, United States
PATENT ASSIGNEE(S): Vertex Pharmaceuticals Incorporated, Cambridge, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6559137	B1	20030506
APPLICATION INFO.:	US 2000-602494		20000623 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. WO 1998-US4595, filed on 9 Mar 1998 Continuation of Ser. No. US 1997-998050, filed on 24 Dec 1997, now patented, Pat. No. US 6436989
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Raymond, Richard L.
LEGAL REPRESENTATIVE: Haley, Jr., James F., Wang, Min, Fish & Neave
NUMBER OF CLAIMS: 41
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 2267
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to prodrugs of a class of sulfonamides which are aspartyl protease inhibitors. In one embodiment, this invention relates to a novel class of prodrugs of HIV aspartyl protease inhibitors characterized by favorable aqueous solubility, high oral bioavailability and facile in vivo generation of the active ingredient. This invention also relates to pharmaceutical compositions comprising these prodrugs. The prodrugs and pharmaceutical compositions of this invention are particularly well suited for decreasing the pill burden and increasing patient compliance. This invention also relates to methods of treating mammals with these prodrugs and pharmaceutical

compositions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 5 OF 17 USPATFULL on STN
ACCESSION NUMBER: 2003:81803 USPATFULL
TITLE: Programmable one-pot oligosaccharide synthesis
INVENTOR(S): Wong, Chi-Huey, Rancho Santa Fe, CA, United States
Zhang, Zhiyuan, San Diego, CA, United States
Ollmann, Ian, Foster City, CA, United States
Baasov, Timor, Haifa, ISRAEL
Ye, Xin-Shan, Beijing, CHINA
PATENT ASSIGNEE(S): The Scripps Research Institute, La Jolla, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6538117	B1	20030325	
	WO 2000009527		20000224	
APPLICATION INFO.:	US 2001-762377		20010710	(9)
	WO 1999-US18151		19990810	

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Barts, Samuel
ASSISTANT EXAMINER: Khare, Devesh
LEGAL REPRESENTATIVE: Lewis, Donald G., Fitting, Thomas
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 3
NUMBER OF DRAWINGS: 33 Drawing Figure(s); 32 Drawing Page(s)
LINE COUNT: 2503
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The reactivity of a number of p-methylphenyl thioglycoside (STol) donors which are either fully protected or have one hydroxyl group exposed has been quantitatively determined by HPLC in conjunction with the development of a broadly applicable approach for a facile one-pot synthesis of oligosaccharides. The influence on reactivity of the structural effects of different monosaccharide cores and different protecting groups on each glycoside donor is characterized and quantified. In addition, a correlation between glycosyl donor reactivity and the chemical shift of the anomeric proton by .sup.1H NMR has been established. A database of thioglycosides as glycosyl donors has been created using this reactivity data. The utility is demonstrated by the easy and rapid one-pot assembly of various linear and branched oligosaccharide structures. In addition, a computer program has been described for use as a database search tool and guide for the selection of building blocks for the one-pot assembly of a desired oligosaccharide or a library of individual oligosaccharides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 6 OF 17 USPATFULL on STN
ACCESSION NUMBER: 2002:332719 USPATFULL
TITLE: Benzo[b]pyran derivatives useful as external agents for the skin
INVENTOR(S): Hattori, Takao, Yokohama, JAPAN
Katagiri, Takayuki, Yokohama, JAPAN

Kitada, Yoshio, Yokohama, JAPAN
Yoshida, Takashi, Okayama, JAPAN
Ito, Hideyuki, Okayama, JAPAN
PATENT ASSIGNEE(S): Pola Chemical Industries Inc., Shizuoka, JAPAN (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6495524	B1	20021217	
	WO 9938858		19990805	
APPLICATION INFO.:	US 2000-600617		20001010	(9)
	WO 1999-JP358		19990128	

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1998-30578	19980128
	JP 1998-164350	19980528

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Barts, Samuel
ASSISTANT EXAMINER: Henry, Michael C.
LEGAL REPRESENTATIVE: Knobbe, Martens, Olson & Bear, LLP
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 669
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB To provide an external agent for thee skin that not only exhibits excellent effects of prevention and amelioration of skin pigmentation but also has no fear of giving adverse influences to the skin and can be used safely, there is added to an external agent for the skin one or more compound(s) selected from compounds represented by formula (I) below: ##STR1##

(wherein R.sub.1, R.sub.2, R.sub.3, R.sub.4, and R.sub.5, independently represent a hydrogen atom or an alkyl group having 1 to 4 carbon atoms; and R represents a hydrogen atom, an acyl group, or a sugar residue).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 7 OF 17 USPATFULL on STN
ACCESSION NUMBER: 2002:209566 USPATFULL
TITLE: Prodrugs of aspartyl protease inhibitors
INVENTOR(S): Hale, Michael R., Bedford, MA, United States
Tung, Roger D., Arlington, MA, United States
Baker, Christopher T., Waltham, MA, United States
Spaltenstein, Andrew, Raleigh, NC, United States
PATENT ASSIGNEE(S): Vertex Pharmaceuticals, Incorporated, Cambridge, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6436989	B1	20020820	
APPLICATION INFO.:	US 1997-998050		19971224	(8)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Coleman, Brenda
LEGAL REPRESENTATIVE: Fish & Neave, Haley, Jr., James F., Wang, Min
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 1628
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to prodrugs of a class of sulfonamides which are aspartyl protease inhibitors. In one embodiment, this invention relates to a novel class of prodrugs of HIV aspartyl protease inhibitors characterized by favorable aqueous solubility, high oral bioavailability and facile in vivo generation of the active ingredient. This invention also relates to pharmaceutical compositions comprising these prodrugs. The prodrugs and pharmaceutical compositions of this invention are particularly well suited for decreasing the pill burden and increasing patient compliance. This invention also relates to methods of treating mammals with these prodrugs and pharmaceutical compositions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 8 OF 17 USPATFULL on STN
ACCESSION NUMBER: 2002:206618 USPATFULL
TITLE: O-aryl glucoside SGLT2 inhibitors and method
INVENTOR(S): Washburn, William N., Titusville, NJ, UNITED STATES
Sher, Philip M., Plainsboro, NJ, UNITED STATES
Wu, Gang, Princeton, NJ, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002111315	A1	20020815	
	US 6683056	B2	20040127	
APPLICATION INFO.:	US 2001-791512	A1	20010223	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-193094P	20000330 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MARLA J MATHIAS, BRISTOL-MYERS SQUIBB COMPANY, PATENT DEPARTMENT, P O BOX 4000, PRINCETON, NJ, 08543-4000
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
LINE COUNT: 1753
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB ##STR1##

wherein

when Y is ##STR2##

or heteroaryl;

A is --O(CH.sub.2).sub.m, S, --NH(CH.sub.2).sub.m, or (CH.sub.2).sub.n where n is 0-3 and m is 0-2;

and R.sup.1 to R.sup.6 are as defined herein.

A method is also provided for treating diabetes and related diseases employing an SGLT2 inhibiting amount of the above compound alone or in combination with one, two or more other antidiabetic agents, and/or one, two or more hypolipidemic agents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 9 OF 17 USPATFULL on STN
ACCESSION NUMBER: 2002:186263 USPATFULL
TITLE: Processes for the preparation of alphaGal(1-3)betaGal(1-4)Glc-OR
INVENTOR(S): Ratcliffe, Murray R., Cochrane, CANADA
Gregson, Jonathan M., Calgary, CANADA
Kamath, Vivek P., Calgary, CANADA
Yeske, Robert E., Calgary, CANADA
PATENT ASSIGNEE(S): Synsorb Biotech, Inc., NW Calgary, CANADA (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002099186	A1	20020725
APPLICATION INFO.:	US 2001-986537	A1	20011109 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-250190P	20001129 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BURNS DOANE SWECKER & MATHIS L L P, POST OFFICE BOX 1404, ALEXANDRIA, VA, 22313-1404
NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 1087
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed are novel synthetic processes for the preparation of the trisaccharide αGal(1→3)βGal(1→4)Glc-OR compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 10 OF 17 USPATFULL on STN
ACCESSION NUMBER: 2002:164352 USPATFULL
TITLE: Apparatus and methods for the automated synthesis of oligosaccharides
INVENTOR(S): Seeberger, Peter H., Cambridge, MA, UNITED STATES
Plante, Obadiah J., Beverly, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002085964	A1	20020704
APPLICATION INFO.:	US 2001-932277	A1	20010817 (9)

	NUMBER	DATE

PRIORITY INFORMATION:	US 2000-226169P	20000818 (60)
	US 2000-254233P	20001208 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FOLEY, HOAG & ELIOT, LLP, PATENT GROUP, ONE POST OFFICE SQUARE, BOSTON, MA, 02109	
NUMBER OF CLAIMS:	58	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	22 Drawing Page(s)	
LINE COUNT:	1947	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB One aspect of the present invention relates to an apparatus for the efficient synthesis of oligosaccharides on a solid support, e.g., formed by subunit addition to terminal subunits immobilized on solid-phase particles. In certain embodiments, the apparatus of the present invention is used in combinatorial methods, e.g., as described herein, of synthesizing oligosaccharides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 11 OF 17 USPATFULL on STN

ACCESSION NUMBER:	2002:99425 USPATFULL		
TITLE:	O-glucosylated benzamide SGLT2 inhibitors and method		
INVENTOR(S):	Washburn, William N., Titusville, NJ, UNITED STATES		

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002052326	A1	20020502	
	US 6555519	B2	20030429	
APPLICATION INFO.:	US 2001-791186	A1	20010223	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-193308P	20000330 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	MARLA J MATHIAS, BRISTOL-MYERS SQUIBB COMPANY, PATENT DEPARTMENT, P O BOX 4000, PRINCETON, NJ, 08543-4000
NUMBER OF CLAIMS:	24
EXEMPLARY CLAIM:	1
LINE COUNT:	1420

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB SGLT2 inhibiting compounds are provided having the formula ##STR1##

wherein

n is 0, 1 or 2;

A is ##STR2##

or heteroaryl which may contain 1 to 4 heteroatoms in the ring which may be selected from N, O, S, SO, and/or SO.sub.2, bearing substituents R.sup.3 and R.sup.4;

and R.sup.1 to R.sup.4 are as defined herein.

A method is also provided for treating diabetes and related diseases employing an SGLT2 inhibiting amount of the above compound alone or in combination with one, two or more other antidiabetic agents and/or one, two or more hypolipidemic agents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 12 OF 17 USPATFULL on STN
ACCESSION NUMBER: 1999:24630 USPATFULL
TITLE: Oligosaccharide glycosides having mammalian immunosuppresive and tolerogenic properties
INVENTOR(S): Srivastava, Om P., Edmonton, Canada
Srivastava, Geeta, Edmonton, Canada
Szweda, Roman, Edmonton, Canada
Bundle, David R., Edmonton, Canada
Hindsgaul, Ole, Edmonton, Canada
Hanna, H. Rizk, Edmonton, Canada
Holme, Kevin, Alameda, CA, United States
Barresi, Frank W., Edmonton, Canada
Du, Minghui, Edmonton, Canada
PATENT ASSIGNEE(S): Glycomed Incorporated, Alameda, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5874411		19990223	
APPLICATION INFO.:	US 1996-754097		19961113	(8)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1995-6593P	19951113 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Fonda, Kathleen K.
LEGAL REPRESENTATIVE: Burns, Doanes, Swecker & Mathis LLP
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 54 Drawing Figure(s); 53 Drawing Page(s)
LINE COUNT: 5991
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed are novel oligosaccharide glycosides having mammalian immunosuppressive and tolerogenic properties, pharmaceutical compositions containing such oligosaccharide glycosides and to methods of using such oligosaccharide glycosides to modulate cell-mediated immune responses in a mammal.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 13 OF 17 USPATFULL on STN
ACCESSION NUMBER: 1998:92193 USPATFULL
TITLE: Selectively fluorinated organic compounds
INVENTOR(S): Chambers, Richard Dickinson, Durham, United Kingdom
Sandford, Graham, Durham, United Kingdom
PATENT ASSIGNEE(S): British Nuclear Fuels plc, Warrington, England (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5789580		19980804	
	WO 9603357		19960208	
APPLICATION INFO.:	US 1996-619498		19960425	(8)
	WO 1995-GB1765		19950726	
			19960425	PCT 371 date
			19960425	PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1994-14974	19940726

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Kight, John
ASSISTANT EXAMINER: Lee, Howard C.
LEGAL REPRESENTATIVE: Sheridan Ross P.C.
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
LINE COUNT: 449
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process for the preparation of a selectively fluorinated organic compound, which process includes reaction of a precursor of said organic compound, the precursor containing at least one Group VI element selected from sulfur, selenium and tellurium, with a fluorinating agent and another halogenating agent and characterized in that the fluorinating agent is elemental fluorine.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 14 OF 17 USPATFULL on STN
ACCESSION NUMBER: 93:46407 USPATFULL
TITLE: Condensed quinoline system N-glycosides
INVENTOR(S): Yamato, Masatoshi, Okayama, Japan
Hashigaki, Kuniko, Okayama, Japan
PATENT ASSIGNEE(S): Mect Corporation, Tokyo, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5217961		19930608	
APPLICATION INFO.:	US 1991-759615		19910916	(7)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1989-451363, filed on 15 Dec 1989, now abandoned			

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1988-330674	19881227
	JP 1989-282208	19891030

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Brown, Johnnie R.
ASSISTANT EXAMINER: Kunz, Gary L.
LEGAL REPRESENTATIVE: Oblon, Spivak, McClelland, Maier & Neustadt
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1

LINE COUNT: 1324
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides condensed quinoline compounds represented by the following general formula (I): ##STR1## in which Z is NH, X is hydrogen, L is lower alkoxy, M is NHQ, Q is --SO.sub.2 CH.sub.3, Y is --NHR, and R is: ##STR2## These compounds are effective for inhibiting KB-cell growth and prolongation of the life span of mice implanted with tumor P-388.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 15 OF 17 USPATFULL on STN
ACCESSION NUMBER: 91:73489 USPATFULL
TITLE: Separation of isomers of furo (3,4-C) pyridine derivatives
INVENTOR(S): Esanu, Andre, Paris, France
Eck, Charles, Shrewsbury, MA, United States
PATENT ASSIGNEE(S): Societe de Conseils de Recherches et d'Applications Scientifiques (S.C.R.A.S.), France (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5047537		19910910	
APPLICATION INFO.:	US 1990-598653		19901018	(7)
	WO 1990-FR228		19900402	
			19901018	PCT 371 date
			19901018	PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1989-7480	19890403

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Dentz, Bernard
LEGAL REPRESENTATIVE: Lucas & Just
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
LINE COUNT: 304
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention relates to a method for the separation of stereoisomers of 7-hydroxy-furo[3,4-c]pyridine derivatives of the formula ##STR1## wherein R.sub.3, R.sub.4 and R.sub.6 represent various substitutents, which comprises reacting a fully O-acetylated monosaccharide halogenide with a racemate of the selected 7-hydroxy-furo[3,4-c]pyridine derivative, to form the (+) and (-) (O-acetylated monosaccharide) (furo[3,4-c] pyridine 7-yl derivative) ethers, then separating the (+) and the (-) ethers by selective crystallization, in an hydroalcoholic medium, either of the acetylated forms or of the corresponding desacetylated forms and, finally, working up each of the separated derivatives by the usual routes. The compounds are known pharmaceuticals.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 16 OF 17 USPATFULL on STN

ACCESSION NUMBER: 89:67455 USPATFULL
TITLE: 13β-alkylmilbemycin derivatives for controlling parasites of animals and plants
INVENTOR(S): Frei, Bruno, Liestal, Switzerland
O'Sullivan, Anthony C., Basel, Switzerland
Gehret, Jean-Claude, Aesch, Switzerland
PATENT ASSIGNEE(S): CIBA-GEIGY Corporation, Ardsley, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4857509		19890815	
APPLICATION INFO.:	US 1986-820490		19860117	(6)

	NUMBER	DATE
PRIORITY INFORMATION:	CH 1985-278	19850122

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Brown, Johnnie R.
ASSISTANT EXAMINER: Peselev, Elli
LEGAL REPRESENTATIVE: Roberts, Edward McC., Findlay, Meredith C.
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1,14
LINE COUNT: 1315
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to parasiticidally and insecticidally highly active compounds of formula I ##STR1## wherein R is C.sub.1 -C.sub.10 alkyl;

R.sub.1 is hydrogen, a silyl group or a sugar residue; and

R.sub.2 is methyl, ethyl, isopropyl or sec-butyl, and to the preparation thereof starting from suitably substituted 15-ester or 13β-ester milbemycins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 17 OF 17 USPATFULL on STN
ACCESSION NUMBER: 84:56932 USPATFULL
TITLE: Cyclic polyamino containing compounds having therapeutic effect and the preparation thereof
INVENTOR(S): Itokawa, Hideji, Tokyo, Japan
PATENT ASSIGNEE(S): Tobishi Pharmaceutical Co., Ltd., Tokyo, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4476299		19841009	
APPLICATION INFO.:	US 1982-401865		19820726	(6)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1981-117968	19810728

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted

PRIMARY EXAMINER: Brown, Johnnie R.
ASSISTANT EXAMINER: Peselev, Elli
LEGAL REPRESENTATIVE: Bucknam and Archer
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 662
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB New compounds of the following general formula: ##STR1## wherein R.sub.1 is acyl, alkyl, cycloalkyl, carboxyalkyl or ester thereof, heterocyclic group, saccharide residue or hydrogen atom, R.sub.2 stands for hydrogen atom or a lower alkyl and R.sub.3 represents hydrogen atom or a nitrogen-containing group,

are provided, among these, some of the compounds to be isolated and purified from a plant belonging to Genus Rubia, other compounds being prepared by chemically modifying the isolated compounds with various kind of substituents and these new compounds having therapeutic effect, in particular such as antineoplastic, emetic, anorexigenic, psychotropic, vasoconstrictive, papaverinic, antiperkinsonian and/or antidiuretic effect.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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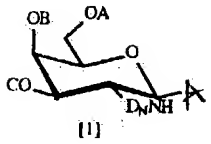

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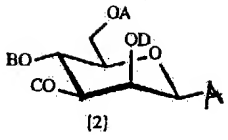

[2]

A-D=Orthogonal Hydroxy Protecting Groups
D_N=Orthogonal Amino Protecting Group
P=Permanent Protecting Group (Benzoyl)
L=Activating Group

A is a leaving group selected from the group consisting of halogen, trichloroacetimidoyl, sulphoxide, -O-alkenyl; and –SR, where R is alkyl, alkenyl, alkynyl, cycloalkyl or aryl.

X_1, X_2, and X_3 are independently selected from H, O, N, or N_3 , with the proviso that only one of X_1, X_2, and X_3 is H, N or N_3 in any molecule;

X_4 is $-CH_2O$; and

B, C, D and E are different and of them B, C, or D is absent if the corresponding X_1 to X_3 is H or N_3, and B, C, D and/or E are selected from protecting groups which can be cleaved orthogonally in any order, such that the cleavage conditions do not compromise the stability of the other protecting or functional groups on the monosaccharide building block, wherein the protecting groups for hydroxy protection are selected from the group consisting of acyl-type protecting groups, carbonates, *t*-butyldiphenylsilyl, triisopropylsilyl, trimethylsilylethyl, triphenylsilylethyl, trifluoromethyl, trichloromethyloxymethyl, trichloromethyloxycarbonate, ethoxyethyl, cyanoethyl, NSC (p-nitrobenzyl-sulphonylethyloxycarbonyl), p-nitrobenzyl-sulphonylethyl, naphthylmethyl, substituted naphthylmethyl, p-methoxybenzyl, 3,4-dimethoxybenzyl, 2,4,6-trimethoxybenzyl, 3,4-methylenedioxybenzyl, acylamidobenzyl, azidobenzyl, p-azido-m-chlorobenzyl, allylic protecting groups, o-nitrobenzyloxycarbonate, o-

Note: X1-X3 = O and X4= -CH2O in the above figures.